CLAIMS

1. Recombinant antibody and single chain Fv fragment derived from murine monoclonal antibody IOR C5 produced by the hybridoma deposited under number ECCC 97061101, wherein said recombinant antibody has the Complementary Determining Regions (CDRs) of the antibody IOR C5 and human constant regions for light and heavy chains.

2. Recombinant antibody according to claim 1 wherein the CDRs sequences of the light and heavy chains are the following:

HEAVY CHAIN

CDR1: S D Y N W H

CDR2: Y I S Y N G T T S Y N P S L K S

CDR3: N D E K A W F A Y

LIGHT CHAIN

CDR1: K S S Q S L L D S D G K T Y L N

CDR2: L V S K L D S

CDR3: W Q G T H F P H T

3. Recombinant antibody according to claims 1 and 2 which is a chimeric antibody derived from murine monoclonal antibody IOR C5 which contains the CDRs and framework regions (FRs) of the antibody IOR C5 and human constant regions of the light and heavy chains, wherein said framework amino acid sequences of the heavy and light chains are the following:

HEAVY CHAIN

FR1: D V Q L Q E S G P G L V K P S Q T L S L T C T V T G Y S I T

FR2: W I R Q F P G K G L E W M G

FR3: R I S I T R D T S K N Q F F L Q L N S V T T E D T A T Y Y C A R

FR4: W G Q G T L V T V S A

LIGHT CHAIN

FR1: D V V M T Q T P L T L S V T L G Q P A S I S C

FR2: W L L Q R P G Q S P R R L I Y

FR3: G V P D R F S G S G S G T D F A L K I R R V E A E D L G V Y Y C

FR4: F G G G T K L E I K R K S T L T G

4. Recombinant antibody according to claims 1 and 2 which is a humanised antibody derived from murine monoclonal antibody IOR C5 that contains point mutations in the framework regions of the heavy and light chains for reducing its immunogenicity.

5. Humanised antibody according to claim 4 which has in the framework regions of the heavy and light chains any of the following point mutations

HEAVY CHAIN:

Position 10 ASP por GLY

Position 17 SER por THR

Position 43 ASN por LYS

Position 44 LYS por GLY

LIGHT CHAIN:

Position 15 ILE por LEU

Position 45 LYS por ARG

Position 63 THR por SER

6. Single chain Fv fragment according to claim 1, comprising the following sequences of the frameworks and CDRs for the variable regions of the light and heavy chains:

HEAVY CHAIN

FR1: D V Q L Q E S G P G L V K P S Q T L S L T C T V T G Y S I T

FR2: W I R Q F P G K G L E W M G

FR3: R I S I T R D T S K N Q F F L Q L N S V T T E D T A T Y Y C A R

FR4: W G Q G T L V T V S A

CDR1: K S S Q S L L D S D G K T Y L N

CDR2: L V S K L D S

CDR3: W Q G T H F P H T

LIGHT CHAIN

FR1: D V V M T Q T P L T L S V T L G Q P A S I S C

FR2: W L L Q R P G Q S P R R L I Y

FR3: G V P D R F S G S G S G T D F A L K I R R V E A E D L G V Y Y C

FR4: F G G G T K L E I K R K S T L T G

CDR1: K S S Q S L L D S D G K T Y L N

CDR2: L V S K L D S

CDR3: W Q G T H F P H T

7. Cellular line expressing the recombinant antibody of any of claims 1 to 5.
8. Host cell which express the single chain Fv fragment of claims 1 and 6.
9. Pharmaceutical composition for treating recto and colon malignant tumours, metastasis thereof and recurrences, comprising the recombinant antibody of any of claims 1 to 5 and a suitable excipient.
10. Pharmaceutical composition for treating recto and colon malignant tumours, metastasis thereof and recurrences, comprising the single chain Fv fragment of claims 1 and 6 and a suitable excipient.
11. Pharmaceutical composition for localisation and identification *"in vivo"* of recto and colon malignant tumours, metastasis thereof and recurrences, comprising the recombinant antibody of any of claims 1 to 5.
12. Pharmaceutical composition for localisation and identification *"in vivo"* of recto and colon malignant tumours, metastasis thereof and recurrences, comprising the single chain Fv fragment of claims 1 and 6.
13. Pharmaceutical composition according claims 9 to 12 comprising also compounds for radiolabelling these antibodies o fragments, which are mixed to produce an aqueous administrable solution.
14. Pharmaceutical composition according claim 13 comprising tecneciun 99, rhenio 186, rhenio 188 or analogues as radiolabellers.
15. Diagnostic method to identify *"in vivo"* recto and colon malignant tumours, metastasis thereof and recurrences, comprising a physiologically acceptable composition which contains any of the antibodies of claims 1-5 or the fragment of claims 1 and 6, which previously have been labelled with Tc-99m or any analogue, and the monitoring of the biodistribution of this composition by immunogammagraphy methods.